

ACM Presidential Candidates Q&A, Round 1
Yannis Ioannidis
18 April 2022

Before providing my specific answers to the questions posed, here are a few general remarks about all of them as a whole.

In my answers below, I indicate my firm intention to initiate discussions on several issues, plan for possible reforms, establish new structures and processes, and take specific actions on issues of concern. These will first be brought to the table for a thorough discussion together with ideas that the other elected officers may have, in light also of the commitments they would like to undertake themselves. They will all be prioritized according to the needs of the community and acted upon, considering also what can be fully accomplished, with concrete outcomes and observable impact, within the two years of our term, and what can be initiated during that timeframe but requires longer time until fruition.

Also, I have kept the very useful question grouping that the moderators have suggested and have done a little bit more myself, in a case of consecutive questions, so that the answers are provided in the order of their original numbering for ease of reading. In cases of non-consecutive questions that were similar (as perceived by me), I've given separate answers with references from one to the other, so that the same ideas are not repeated in length multiple times, and have specialized my answer further as appropriate.

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- 1) What do you think are the most important steps ACM should take to reach out to new members and especially younger members? (4)
 - 2) ACM's membership size has been almost stagnant for a decade. What do you plan to do about this? (3)
 - 3) How might you boost engagement with existing ACM communities or build new and better ones? (2)
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I intend to work towards enriching the service portfolio of ACM to further diversify it with **different offerings to different member categories**, so that the attractiveness of ACM membership increases significantly, with a vision of making it a “must-have”. This will start with discussing with members of each category, listening to their special needs, and establishing plans to satisfy them. For some member categories, ACM has dedicated Boards already mandated accordingly (Practitioners Board, Education Board, etc.), so the first discussions will be with their leadership on identifying ways I could help their efforts. Below are examples of key member categories based on competencies/professional background and the types of services that might be particularly attractive for each one (which can be further diversified if one looks at the socio-economic, cultural, geographical, generational, and other dimensions within each category):

- Core computing researchers: They are the target of the great majority of ACM member services currently. Remaining or becoming (again) members of ACM must be meaningful and useful to them beyond simply the (dwindling) need of belonging to a professional group of peers or getting discounts to conference fees. In close collaboration with SGB and other SIG leaders, new services will be explored for helping our members conduct their research in the current era, starting from services that may be built on top of the ACM Digital Library. A personal priority is establishing services for helping researchers operate in the context of Open Science and the demands it brings, e.g., reproducibility of experiments, transparency at meaningful stages of the research lifecycle, and open access to other research objects besides publications.
- Non-researcher computing professionals (aka practitioners): They are roughly half of the ACM members and we need to pay more attention to serving their particular needs. The corresponding Boards and Committees, where they exist, are doing a fabulous job in this direction, but I intend to help all of us intensify our collective efforts to identify and/or realize new attractive services. Examples include organizing meetups for those in industry, liaising with veteran entrepreneurs for aspiring start-uppers, and providing teaching materials for those in education. Often it is necessary to offer these services in geographically local settings. The Local Activities Committee of the Practitioners Board is an effective instrument that needs to be strengthened and possibly also replicated for working with other member categories. Invariably such local activities cannot be undertaken by ACM alone, but in collaboration with other entities with the appropriate expertise.
- Computing-related Interdisciplinary professionals: As I mentioned in my candidacy statement, increasing the spectrum of interdisciplinary computing work represented in our SIGs (or EIGs) and having those who are active in such areas find their home in ACM

will be a key dimension of my presidency, if I am elected. In this, I will be taking advantage of my long-term experience in my research projects, which have been predominantly interdisciplinary and have involved colleagues from a broad variety of fields and disciplines in the sciences and humanities. Two paths to follow in this direction are (a) continuing and broadening the ACM efforts of initiating interactions with scholarly societies focusing on other fields to establish joint journals, conferences and other appropriate activities, joint memberships for their computationally inclined members, and eventually SIGs/EIGs when appropriate, and (b) identifying interdisciplinary efforts funded around the world and engaging their leaders and other participants into establishing new ACM activities.

Attracting the **younger generation** of computing professionals requires a different mindset from what may make sense for those who are already established. Many of the issues that were important to early-career professionals one or two decades ago (e.g., privileged access to content or even the concept of “joining” for its own sake) are not as relevant to newcomers today. Listening to the voice of the new generation is again the fundamental first step and I will use the lessons learned by ACM in recent years as a springboard for interactions with representative early-career members of our community.

In addition, I believe that it is imperative for ACM to provide a safe home for young colleagues to breed new ideas, independent of other influences. In an interpretation of “local” that is thematic this time, such fermentation activities have better chances of succeeding when done first in a focused context. In our case, what better than the context of a SIG. Select young **ambassadors** who are active in the area addressed by a SIG and support them in their organizing a brainstorming meeting/retreat on issues they are concerned with. In collaboration with SIG leaders, we can disseminate experiences with such activities within a few SIGs to other SIGs and other ACM groups.

A case in point is mentoring. A small number of SIGs have already experimented with mentoring of young professionals by more senior colleagues working in the same or a different area of computing. Mentoring on career paths, professional growth, and other issues of concern for those in the early stages of their professional path is extremely valuable and desirable, and I intend to work with the SIGs and help ACM grow a mentorship program.

In the same vein, specialized types of events, such as summer schools, hackathons, and other types of competitions are extremely valuable for students and expose them to the values of ACM. Several SIGs and regional Councils (I have organized the first three Summer Schools on Data Science, with funding from ACM Europe) hold such events regularly. I intend to work with other leaders to spread such events across ACM and bring them to par with our traditional conferences and workshops, as important elements of our portfolio of offerings, with funding for scholarships when appropriate.

Underlying all the ideas above is **open communication**. Building up on previous leaders’ practices, and in addition to conventional market research through regular surveys, I intend to

establish new communication channels, where members can raise issues and questions (much like the presidential candidate Q&A we are in the middle of right now), others can vote on them, and then at appropriate intervals, e.g., semiannually, issues are prioritized and acted upon. Similarly, we need channels for the opposite direction, where issues and questions will be raised by the Executive Committee and put out to the members. Thus, it will be both a pull and a push process in terms of raising issues/questions.

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4) What are the concrete steps that you would take to further expand geographic diversity and deepen the participation of more countries in ACM?

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The concept of “local” in its various contextual semantics permeates many of the activities outlined above for expanding membership and comes again here, in its geographic interpretation. We are a global organization, but most of our activities are concentrated in North America and almost all our staff is in NY. I will initiate a discussion on how offices of nontrivial size might be established in Europe and Asia to begin with, where we already have Councils operating, and in other regions, e.g., Latin America, Australia, and Africa, later. Coordinating local activities locally goes a long way in ensuring their success, their quality, and their proliferation. In addition to the operational issues that these offices will undertake, their mere presence and expansive, possibly ACM-wide activities will send a concrete loud message on the global nature of ACM.

In addition, following on the footsteps of the ACM Europe Council and my observations of its relevant initiatives during my term as a member, I will work with leaders in all dimensions (SIGs, geographic regions, ACM central) to establish customized processes in two directions: (a) From a region to ACM: examples include processes for promoting people from the region to the ACM governance, placing them in specialized committees formed, and nominating worthy colleagues for awards or high membership ranks; (b) From ACM to a region: examples include processes for bringing ACM conferences and other types of events to a region, arranging for ACM leadership to appear in local events and promoting international collaboration.

Finally, ACM has always been sensitive to the extreme heterogeneity of the world, especially with respect to the financial situation of different regions, but also other dimensions of life, and has been offering special deals for its services where appropriate. In addition to searching for similar opportunities to further expand this tradition to other parts that may need it, I would like to initiate local mentoring/community-building activities that inspire the young generation to pursue work in computing, support the community’s growth in new areas of research or practice that resonate with the needs of the region, and empower its members to potentially contribute to broader ACM activities bringing their local perspectives. This will be planned in close collaboration with the Distinguished Speakers Program, whose mandate is more focused but can serve as inspiration for a broader mandate of such a local activities program.

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5) What do you see as the main benefits of ACM membership? (2)

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As hinted by the examples in my earlier answers, the value of each benefit varies for different ACM audiences. Nevertheless, the main general benefit of ACM membership for me is the ability to join forces with other computing professionals at large scale and contribute to causes bigger than what an individual or a small group can do alone. Issues such as the global challenges raised in question #14, the global discussions on research assessment raised in question #20, or issues dealt with by the major ACM Boards and Councils, such as those on Technology Policy, Education, and Diversity, Equity, and Inclusion, are characteristic examples among many others.

In symmetry, on the receiving end, ACM membership allows one to become the beneficiary of other members' contributions. Characteristic examples include (young researchers and practitioners) being mentored on career paths and professional growth, participating in the fora organized by the SIGs to learn about the most recent research results and exchange ideas on new emerging areas, being exposed to policy discussions around technology issues, and having privileged access to some of the forthcoming advanced DL services.

Intimately related to and overarching all these as an ACM membership benefit should be the implied allegiance to the ACM Code of Ethics and Professional Conduct, serving as a testimony of one's professional identity and a pointer to the source of inspiration and guidance for professional behavior.

As a comment indirectly related to the question, given that ACM currently has approximately 110K members, while those contributing to or benefiting from its activities are approximately 4M computing professionals, I believe that we should reexamine the very concept of ACM membership, the structure of our membership model and associated financial elements, and the paths through which members arrive at ACM. I believe this is most critical for the future of ACM and, if elected, I intend to initiate a discussion on this the soonest possible.

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6) How will you make ACM more responsive to the needs of members and volunteers? (3)

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I have essentially addressed this in my answers to questions #3 and #4. Open interaction channels (and regional offices, when established) will be the main instruments for myself and the other officers to have our finger on the pulse of the members. Issues will be raised offline at regular intervals and will be prioritized and addressed accordingly. Urgent, time-sensitive matters will be dealt with outside of such a regular process. Live chats between members, the officers, and other volunteer leaders may also be organized, if deemed possible, for immediate thought exchanges. Participation of young ambassadors, regional representatives, and members from the entire spectrum of the computing community will be actively encouraged and promoted.

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7) Last year Moshe Vardi raised, in a CACM column on "The Agency Trilemma and ACM", the issue of the working relationship between ACM members, elected officers, and ACM HQ staff. How do you plan to ensure that ACM is membership driven? (1)

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A simplified, software-engineering-inspired conception in my mind of the work of any member-based organization is that (a) members specify their requirements, (b) officers design and plan based on the specifications, and (c) staff implement the designs according to the plans or support their implementation by volunteers.

The ACM Bylaws describe in no uncertain terms (and in proper language) the rights and responsibilities of each group. Nevertheless, they may need to be reaffirmed and rearticulated, as the current version of the Bylaws is already quite a few years old. For this and other points of concern, I will be setting up a task force on studying the Bylaws afresh and proposing any changes or updates needed to keep them in sync with the realities of the present and the expectations of the future.

The officers bear the main responsibility of ensuring that the roles of the three groups of concern are respected and that no group oversteps its authority. In this sense, the open communication channels between officers and members that I have mentioned in my answers to other questions are the key instrument I intend to use to ensure that the voice of the members is heard loud and clear. I want to emphasize that this communication will be bidirectional, as not only members will be raising issues and asking questions, but also officers will be doing the same when meaningful, to obtain the members' reactions, e.g., on how to prioritize the many worthy causes and broad activity categories (several of which have been raised in this set of questions) that ACM can invest in using part of its reserves and/or yearly surplus (if any). Furthermore, actions representing significant changes will be outlined in public roadmaps, so that everyone is accountable. Similarly, tight communication and monitoring between officers (especially the president) and staff will ensure that the decisions of the former are realistic and implemented correctly.

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8) Do you have any plans to help authors benefit from their published papers? For example, giving a percentage of the money ACM makes per download to the authors (22) (Note: This was the most voted for question by a wide margin.)

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Essentially the example is asking for ACM to run a "data market", where data is the publications in this case. As a matter of principle, I believe that such an activity is incommensurate with the mission of ACM.

ACM is a scholarly society (aka professional society, learned society, ...) whose members come together to join forces to exchange ideas, promote their profession, and eventually change the world with their craft. As with most such societies, publishing is a consequence of such

activities, with members (but also non-members) disseminating their research results and receiving exposure from the DL (which is some form of compensation, actually).

Operating as a publisher of high-quality journals, magazines, and conference proceedings is a service that ACM offers to the broad computing community, and the surplus from the proceeds of the publication activities go towards other services and worthy causes that the members are interested in having ACM support. I believe these do not include running a publications data market. Besides, ACM is moving towards full Open Access with a no-surplus model, which will preclude any form of monetary compensation of authors anyway. In the current Open Access model of per-paper Article Processing Charges, member authors of have lower fees (which is another form of compensation).

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9) The ACM increasingly resembles a predatory publisher, abusing unpaid reviewers and editors while charging outrageous open access fees to host PDFs badly. How will you reduce OA fees while offering fair compensation for academic labour?

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Reviewing and editing is a dimension of one's contribution to his/her professional community. Especially for junior researchers, it's also part of their growth, training one may say, a reflection of the community's appreciation of their prior accomplishments, and a proof for their potential. I have been walking this path since my early days in research until now and the experience has been richly rewarding in the above sense. I do not see reviewing and editing as labour that requires compensation, and I certainly don't see it as abuse. I should also note that predatory publishers prey on the unsuspected authors and not on reviewers or editors, as they invariably have none of those.

It was a strategic decision by ACM to establish the current OA fees exactly at an estimated level that covers the publication program cost, without any pursuit of generating surplus. This is also evident when comparing with the substantially higher fees charged by other publishers of similar quality, whether commercial companies or peer scholarly societies.

Nevertheless, although I disagree with most of the assertions of the general question, I isolate its part about "How will you reduce OA fees?", which I would very much like to find an effective answer to if possible. In this direction, I intend to reexamine all the publishing costs to identify areas where they may possibly be reduced.

In addition, for over 10 years I have been coordinating the OpenAIRE infrastructure for (primarily European) publications and data (including its CERN-backed repository Zenodo), which is the platform that supports the Open Access policies of Europe. It sprang out with a Green Open Access philosophy but is now dealing with OA of all colors. Given my experience with the origins of the infrastructure, I intend to intensify the exploration of collaborations with OpenAIRE as well as pre-print archives for additional paths to Open Access.

Finally, in the spirit of current ACM policies of waiving OA fees and/or offering lower-cost deals to researchers and institutions from underprivileged areas around the world, I will continue the efforts of identifying additional opportunities in the same direction, e.g., for all young researchers or colleagues undergoing shorter-term financial instability.

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10) In June 2020, ACM Council adopted the goal of making the Digital Library fully Gold Open Access within five years (subject to Covid and sustainability). What will you do to make this happen? (1)

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With my OpenAIRE history and my firm belief in Open Access, I will stay the course and help as much as possible the ongoing efforts of the ACM Publications Board to convince the organizations that have yet to convert to the new model (ACM Open) accept the idea and do so at a speed that will allow ACM to achieve its goal within the original timeframe.

With the current rate of success and the relatively small delays that the Covid pandemic has caused, I am optimistic that the original goal can still be achieved in time. Nevertheless, in case on the way it becomes evident that there will be serious delays, I believe ACM should invest some of its reserves to finance the transition to ACM Open anyway, as this is a priority for a significant part of the members, including myself.

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11) How will you fix the systemic problems with the ACM Digital Library? What do you see as the most pressing problems? (2)

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I will answer the questions under two possible interpretations of “systemic problems”.

System architecture and implementation of the DL software platform: Implemented in house, the original version of the DL system, and several subsequent versions after that, indeed had significant problems related to scalability, robustness, and maintainability. Nevertheless, all these were addressed a few years ago, with the move to a new platform, which has been implemented by a specialized 3rd party. In addition to the changes in core system characteristics, much functionality and behavior at the user interface has been added or significantly improved, such as having a responsive interface (25% of the DL users are not on desktop currently, and this is expected to increase) and ensuring dramatically increased accessibility and enhanced admin functionality. Work at this level is still under way and, if elected, I will ensure that it proceeds uninterrupted and freshened up if needed, towards an even more effective platform. Nevertheless, even with just the work done so far, the usage of the DL has increased significantly in a short period of time (roughly by 50%, in steady state, and roughly by 200% during the Covid pandemic, when the entire DL was opened), indicating a successful transition and the appreciation of the result by the DL users.

System behavior and user-level functionality: The transition to a new platform has also brought significant improvements to the usability and usefulness of the DL to its users. Nevertheless,

there is still much to be desired. Based on my own experience of using the DL, the key problems are the quality of some metadata, the quality of the set of answers received after a search, and the quality and ease-of-use of the actual interface, which is sometimes unintuitive. The newly established Digital Library Board has been working on improving several aspects of the DL and has already accomplished a great deal. As a member of that Board, I am involved in activities that are still underway and will continue to monitor and help with its efforts independent of the election results, as this is too close to heart.

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12) COVID has opened new opportunities for virtual conferences. How do you see the future of ACM conferences? virtual, in person, hybrid? and how might the pricing model change? (2)

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The jury is still out on the future nature of conferences and the corresponding costs. Everyone's experience is that a virtual conference is not the same as being in person. The two most prominent issues that are brought up as being lost are serendipitous interactions outside the meeting rooms and distancing/shielding off from the distractions of one's regular working environment. These, however, may not be important for all types of meetings. With the rapid advances in the relevant technologies, being virtual allows many more people to attend and have an experience of reasonable quality, and most importantly, is ideal for economy (saving on attendee travel time and money) and ecology (reducing carbon footprint). Hybrid meetings have a little bit of both but also the additional complexity and cost of needing to serve attendees in two different modes. I believe it will be a couple of years until different communities find the right mode or balance of modes for their meetings.

ACM SIGs have been exploring different paths already. Sharing their experiences regularly, both between them and with the ACM leadership, will be critical to see if any forms of conferences are becoming commonplace, in which case, there should be an investigation of what services may be offered horizontally by ACM to support them and what cost models may be appropriate, with the attendance fees following suite accordingly.

Incidentally, I would not be surprised if completely new forms of conferences pop up from the current exploration, finding operation points in different dimensions of the conference organization space, beyond the trilemma physical-virtual-hybrid. For example, there have been discussions in the ACM context about multi-site conferences, organized with physical presence at a small number of cities around the world, and the schedules of live presentations and their follow-up recorded airings adjusted accordingly. This would give a chance to more people to travel, as it would be more convenient and closer to home, still have an in-person experience with a subset of the attendees, while being part of the whole event. The effectiveness of such a meeting is unknown currently, but especially as interaction technologies advance further, I expect to see several innovative ideas like this one being experimented with, some of which may be successful and give us new standard meeting forms.

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13) Do you think the surveillance capitalism model currently practiced by many large tech companies violates the ACM Code of Ethics? If no, why not? and if yes, what might you change about ACM's relationships? (2)

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The ACM Code of Ethics and Professional Conduct “expresses the conscience of the profession” and “is designed to inspire and guide the ethical conduct of all computing professionals ... and anyone who uses computing technology in an impactful way”. Hence, it is addressed to individuals and not companies. On the other hand, it is not addressed just to ACM members but the entire community of those working in computing, which includes the leadership of many tech companies.

The issues raised by the question are very important and should be dealt with extreme care and sensitivity and based on deep knowledge and understanding of what is involved. Privacy intrusion and surveyance may be practiced by “large tech companies”, but also any other tech company, charitable organizations, and even governments, and significant ethical issues arise in all cases. I intend to bring to the table experts from all relevant fields to examine the question and provide well-informed recommendations for the role of ACM in this context, based on which we should take appropriate action.

Unfortunately, ACM does not have mechanisms to educate computing professionals (members or nonmembers) about its Code of Ethics, manage ethical complaints, or even enforce the Code, if necessary, e.g., in case of a conflict between one’s ACM membership and their job. It is critical for ACM to promulgate its Code of Ethics both within and outside its membership base and to encourage everyone to abide by it. As first steps in this direction, I will investigate about ACM (a) launching a campaign to educate all technologists on the Code and its importance, (b) holding special events, possibly In a SIG context, that discuss ethical issues that members face in research and practice, and (c) opening a hotline to support ACM members who work in industry to consult on ethical issues.

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14) The world as it is today faces tremendous problems, many of which pose existential threats. Addressing the problems caused by climate change may be the most obvious, but there are many others. What are your thoughts on the computing profession's responsibility to society at large in relation to these problems and what specific steps would you propose that ACM should take in relation to them?

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The UN Sustainable Development Goals (SDGs) represent a universally accepted effort to address the fundamental global threats to humanity and its environment. To implement the SDGs (and the Paris Agreement on Climate Change), the UN Sustainable Development Solutions Network (SDSN) has been bringing together education, research, and policy analysis organizations of the highest caliber, organized in national and regional hubs, and cooperating globally. SDSN has introduced six SDG Transformations as modular building-blocks of SDG achievement, each one connected to a subset of the SDGs. One of them is the “Digital

Revolution for Sustainable Development” Transformation, which is the only one connected with all 17 SDGs. This demonstrates beyond any doubt the fundamental importance that computing has in addressing the greatest problems the world is facing currently and, consequently, the heavy responsibility of the computing professionals that comes along with it for working towards achieving the SDGs. This is a call to arms for ACM!

As I mentioned in my candidacy statement, addressing some of these global challenges is a priority for me. Based on my experience as a member of the Steering Board of the Greek hub of UN SDSN and from my interactions with SDSN Global, which is established in the US, I intend to set up the appropriate mechanisms for ACM members to get involved. A task force will be formed to identify these mechanisms, which will then be put in motion, possibly leading to the establishment of a permanent Sustainability body in ACM. In parallel, an awareness campaign with a series of interdisciplinary webinars will start to discuss relevant issues and identify opportunities for involvement, e.g., assessing the impact of computing energy on climate change, with input from data center and HPC experts, economists, and environmentalists; or reporting on the plans of the Destination Earth initiative in Europe (I am a member of its Advisory Board) to develop a digital twin of the earth. The goal is to inform and inspire ACM members to contribute some of their time and energy to operationalizing the “Digital” Transformation towards achieving the SDGs. Their involvement may be realized either via ACM itself, if possible, or via their own institution, which should join their national or regional SDSN hub, if it is not already a member.

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- 15) How will you navigate the divide between those who are thriving within the existing ACM community and those who demand large, structural changes toward diversity, equity, and inclusion? (2)
- 16) How would your values and professional experience contribute to the ACM's efforts to create a more diverse, equitable, and inclusive environment for members? What specific initiatives or organizational changes would you pursue towards that end?

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Open communication channels with members, as outlined in some of my other answers, form the foundation for understanding the issues in detail and charting a path to address them. These channels will be feeding valuable information to the work of the ACM Diversity, Equity, and Inclusion Council, which is making a tremendous effort and with which I intend to be interacting very closely, to identify the gaps that exist, find solutions for filling them, evaluate their impact after they have been applied for some time, and then adjust or replace accordingly.

In this direction, I see both external and internal gaps to be looked at: (a) gaps in the ACM coverage of the landscape of all computing professionals, and (b) gaps in the ACM volunteers’ coverage of the landscape of all ACM members (volunteers spanning from the highest ACM and SIG governance level to much more focused contributions, for example, as workshop invitees). These gaps may manifest in any of the landscape dimensions, gender, geography, area of the field, age, and others. In collaboration with the DEI Board and other stakeholders relevant to

each dimension, possibly different, customized actions will be taken to fill the corresponding gap.

As my concrete intension, based on my personal experience in my service to ACM, especially as the Secretary-Treasurer, SIGMOD Chair, and Publications Board member, and in the spirit of equity, I would like to introduce a new norm of requiring the presence of members falling into any of the gaps identified in all major ACM committees and boards. After discussions with and hopefully approval by the leadership bodies of ACM, this should be applied even when the typical, otherwise very appropriate criteria, for membership in these committees and boards are not fully satisfied by those chosen. This is not for keeping up appearances. The mere presence of these colleagues will have significant impact both on strengthening them so that they may soon be satisfying all the relevant criteria and graduating out of their gap of origin, but also on having them serve as role models for more like members to dare step forward.

It is my firm belief that this or other similar actions will make ACM an environment where all computing professionals and certainly all ACM members will have the opportunity to thrive.

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- 17) ACM has becoming increasingly interdisciplinary with more scholars from the humanities and the social sciences. What is your take on this evolution? (2)
- 18) How do you see the mix of required computing skills changing over time (e.g. less programming/coding)? What would you do to prepare ACM for the changes that you expect/forecast will come?

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As I have mentioned earlier, throughout my career, my research projects have been predominantly interdisciplinary. For example, the currently active projects of my team include collaborations with social scientists, economists, archaeologists, museologists, environmental scientists, agricultural scientists, neuroscientists, and medical doctors. These collaborations are a rich inspiration, give me an opportunity to interact with many junior and senior scientists whose work cross fertilizes computing with their discipline of origin, and keep reaffirming my conviction that some of the major breakthroughs in computing in the near future will be coming from where our discipline meets others. Hence, it is only natural that the future of ACM, the next frontier of its growth, lies largely in attracting scientists from all these other disciplines. I have expressed this vision in my candidacy statement as well, indicating it as one of the key directions I intend to put my energy on if elected, and I very much welcome the fact that we are already experiencing some influx of new members from outside computing.

Such interdisciplinary growth will necessarily create new needs for computing education. Such needs may vary themselves across the different computing-related disciplines thus introduced. The ACM Education Board has been working hard through the years to address all computing education challenges, including the creation of several reports on recommended Curricula, each one covering a different skill set and targeting a different set of computing professionals. The most recent such report is on the fundamentally interdisciplinary area of Data Science, whose timely creation is a great testament to the quality of the work that the Education Board

is doing in monitoring the trends in the field and swiftly acting accordingly. If elected, I will be helping the Education Board to continue the same course it has been on, strengthening its operations by providing additional funds, if necessary, and recruiting additional volunteers for its continuously broadening activities, so that it may address effectively the continuously changing/expanding requirements for computing skills.

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19) The leadership of other ACM SIGs has taken public positions on issues like the war in Ukraine and the Black Lives Matter movement. Do you think it is appropriate for SIGCSE to take public positions on issues not directly related to Computer Science Education, with or without polling its members?

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Any formal or informal group has the right to express its members' collective (i.e., if it is essentially consensual) opinion on global or local societal issues, as long as it stays within the limits of its purview and does not enter any controversial political sphere. I believe that this right is unquestionable if the issue affects the group's current or potential members. SIGCSE is a group **about** Computer Science Education but also a group **of** Computer Science Educators and other scholars on this area. There are many CS Educators who are of color or live in the Ukraine (to continue with the two examples mentioned) whose lives have been or may potentially be severely affected if they end up on the wrong side of the corresponding issue of concern. Hence, I believe it is appropriate for SIGCSE to express its sentiment and support the communities it is intimately related to, ideally based on open polling of its membership.

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20) Several colleagues in the community express concerns about research rankings of programs, metrics of research productivity for individual researchers, and other related criteria. To what extent do you believe the current criteria fairly reflect the quality of research conducted and how might these criteria/metrics be improved?

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Research evaluation, be it of a university, a department, or an individual, has become an extremely quantitative, extremely indirect process. We count the number of journal and conference papers, number of citations, number of downloads, number (and budget) of grants, we measure the h-index, we weigh research work through the journal and conference impact factors and their appearance in certain indexes, and we use several other numeric (or Boolean) indicators. Which of these matter for research evaluation differs around the world, but the fact that some large subset of them does matter is a global phenomenon.

We have been moving away from the fundamental nature of research evaluation, which is predominantly qualitative, reducing it to a quantitative, almost algorithmic/programmable process. Although some quantitative measures are, of course, relevant, valuable and cannot be ignored, one can easily see the negative impact that such a move has had: superficial evaluations, publishing minimum publishable units, research that looks at "small" technical details and not trying to crack the truly challenging, more complex problems, publication

hunger, paper production inflation, proliferation of (dubious) publishers, and eventually unfair and potentially erroneous evaluations.

We need to take stock of where we are currently and return to the basics. We need to follow the motto “Read! Don’t count!”.

To change the current momentum, all relevant stakeholders must agree to changing. Some of them changing and others continuing on the current path will be unfair and possibly disastrous. For example, evaluations could be based on the top N most important publications/research outputs (for a small N, depending on the type of the evaluation and the stage of the entity evaluated), as identified by the entity evaluated, with the evaluators being obliged to reach a conclusion after a careful examination of them. This may reduce the size of the publishing industry but will result in more accurate evaluations and in the end advance science and technology further.

Currently, there are efforts that study research evaluation methodologies and are mandated with proposing new ones. A case in point is one at the European level, where on the initiative of the European Commission, currently more than 280 organizations from Europe and a few from around the world have formed a coalition on reforming research assessment. The coalition includes research funding agencies, research performing organizations (universities and research centers), national/regional assessment authorities, scholarly societies, and other relevant organizations, which are all committed to implementing reforms to the current research assessment system. Emphasis will be given to research evaluation in the context of Open Science research lifecycles, where research output other than publications may be considered equally valuable and could be evaluated with appropriate excellence criteria.

As a professional organization/scholarly society, ACM should participate in this and other relevant initiatives around the world and play an important role in helping identify any unique directions that may need to be explored for new forms of evaluating computing research.